

WHAT IS CLAIMED IS

1. A DNA comprising a base sequence encoding one of the following polypeptide (a) or (b):

5 (a) a polypeptide comprising the full length or a part of an amino acid sequence which is the same or substantially the same as an amino acid sequence represented by SEQ ID NO:1, SEQ ID NO:15 or SEQ ID NO:18, and

10 (b) a polypeptide comprising an amino acid sequence derived from an amino acid sequence represented by SEQ ID NO:1, SEQ ID NO:15 or SEQ ID NO:18 by deletion, substitution or addition of a part of the amino acids and having a biological activity substantially equivalent to the polypeptide (a).

2. A DNA as set forth in one of the following (a), (b), or (c),

15 (a) a DNA which encodes the full length or a part of the amino acid sequence represented by SEQ ID NO:1, SEQ ID NO:15 or SEQ ID NO:18 derived from the base sequence represented by SEQ ID NO:2, SEQ ID NO:16, or SEQ ID NO:19,

20 (b) a DNA which hybridizes with a DNA comprising a base sequence complementary to the DNA as set forth in (a) under a stringent condition, and

25 (c) a DNA which hybridizes with DNA comprising a base sequence complementary to the DNA as set forth in (a) under a stringent condition, and encoding a protein which has a biological activity substantially equivalent to the polypeptide (a).

3. A gene derived from a rodent and comprising the DNA according to claim 1 or 2.

4. A gene according to claim 3 wherein the rodent is a mouse.

30 5. A polypeptide as set forth in one of the following (a) or (b),

(a) a polypeptide comprising the full length or a part of an amino acid sequence which is the same or substantially the same as an amino acid sequence represented by SEQ ID NO:1, SEQ ID NO:15 or SEQ ID NO:18, and

35 (b) a polypeptide comprising the full length or a part of an amino acid sequence derived from an amino acid sequence

represented by SEQ ID NO:1, SEQ ID NO:15 or SEQ ID NO:18 by deletion, substitution or addition of a part of the amino acids and having a biological activity substantially equivalent to the polypeptide (a).

- 5 6. A polypeptide according to claim 5 comprising a recombinant protein generated in a host cell in which the DNA according to claim 1 or 2, or the gene according to claim 3 or 4 is introduced.
7. A recombinant vector comprising the DNA according to claim 1 or 2, or the gene according to claim 3 or 4.
- 10 8. A recombinant animal cell in which the recombinant vector according to claim 7 is introduced.
9. A recombinant animal in which the recombinant vector according to claim 7 is introduced.
10. An antibody specifically binds to the polypeptide according to claim 5 or 6.
- 15 11. A screening method which screens a vascular proliferation and differentiation control factor or compound using the DNA according to claim 1 or 2, according to the gene of claim 3 or 4.
- 20 12. A gene expression measurement kit used for the screening method according to claim 11.
13. A screening method which screens a vascular proliferation and differentiation control factor or compound using the polypeptide according to claim 5 or 6.
- 25 14. A polypeptide binding substance measurement kit used in the screening method according to claim 13.
15. A screening method which screens a vascular proliferation and differentiation control factor or compound using the recombinant animal or the recombinant animal cell according to claim 8 or 9.
- 30 16. A vascular proliferation and differentiation control activity measurement kit used in the screening method according to claim 15 to measure the activity of the factor or compound.
17. A screening method which screens a vascular proliferation and differentiation control factor or compound using the antibody according to claim 10.
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18. An antibody titer measurement kit used in the screening method according to claim 17.

19. An angiogenesis inhibitor which contains one of polypeptide of (a) or (b) as an active ingredient:

5       (a) a polypeptide comprising whole or a part of the amino acid sequence identical or substantially identical to the amino acid sequence represented by SEQ ID NO:18,

10       (b) a polypeptide comprising whole or a part of the amino acid sequence which is derived from the amino acid sequence represented by SEQ ID NO: 18, by deletion, substitution, or addition and has a biological activity substantially equivalent to that of the polypeptide of (a).